IPPM & LMAP: the glue

- LMAP defines protocols
  - between MA and controller to request tests
  - between MA and collector to report test results
- IPPM defines metrics for tests
- The glue: a registry for metrics/tests so that the LMAP protocols can refer to a specific IPPM metric/test
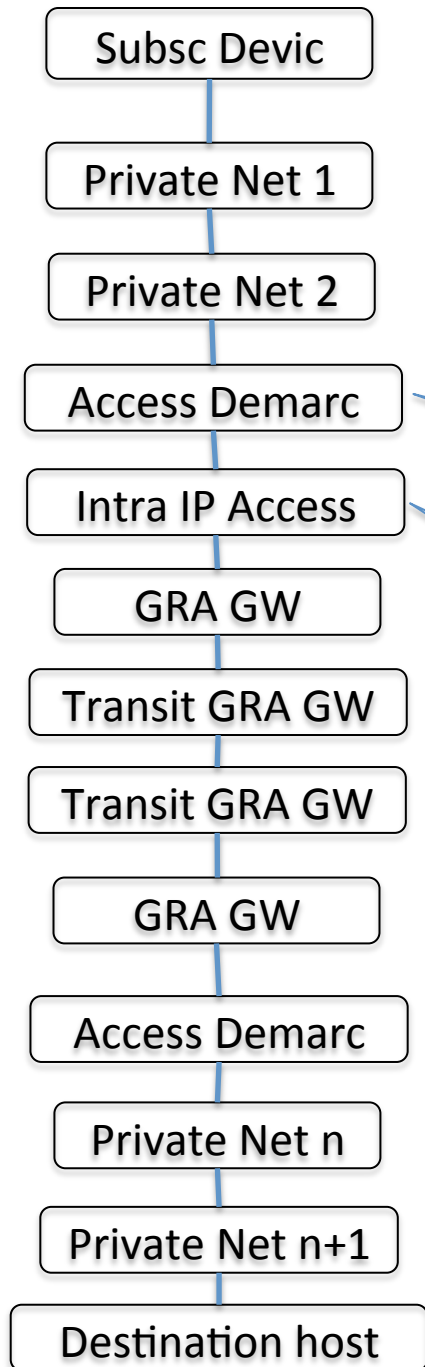
Protocol independent registry

- Protocol Independent registry: Allows multiple protocols to be defined between Controller, Measurement Agents and Collector
    - Within the same platform: e.g. IPFIX between the MA and the Collector and YANG/NETCONF between the Controller and MA
    - Across different platforms: maybe some will use IETF protocols, others will use BBF TRxx protocols or else to request and report IPPM tests
    - This may requires additional protocol specific fields in the registry

What is in the registry?

- New registry: tightly defined metric with few open parameters (don't affect the nature of the test)
  - e.g. source and dest address and the like
- Less is more: reduced number of metrics proven useful
  - Well defined metrics that have been proven useful in operations
- Side benefits:
  - Inventory of useful and used metrics
  - Comparable test results even if performed by different implementations and in different networks

Reference Path

Subsc Devic

Private Net 1

Private Net 2

Access Demarc

Intra IP Access

GRA GW

Transit GRA GW

Transit GRA GW

GRA GW

Access Demarc

Private Net n

Private Net n+1

Destination host

usually defined as the Ethernet interface on a residential gateway or modem

This is the first point in the access architecture beyond the Access Service Demarc. where a globally routable IP address is exposed and used for routing.